



When less is even more

After stabilization and dewatering, sludge is either directly reused in agriculture/ composted, incinerated or sent to landfill.

Cross Life will reduce the amount of sludge produced by wastewater treatment plants, decreasing the cost of sludge management and the environmental impact.

Cross Life will produce biobased crotonic acid and poly(vinyl acetate-co-crotonic acid) from sludge, applying an industrial symbiosis approach.

THE PROCESS Dewatered sludge. Sludge from wastewater and food production waste. Hydrothermal carbonization + acidogenic fermentation + filter press. Aerobic Volatile fatty fermentation B acid-enriched + thermolytic distillation. stream. Photo-mediated polymerization.

PARTNERS

Bio-based

crotonic acid.

Building block

for biological

and chemical

processes.





UNIGRA SAGA





Poly(vinyl acetate-co-crotonic acid).

Polymer for industrial goods.



✓ START 1ST SEP. 2022

CROSS LIFE ROADMAP

31ST AUG. 2027 **END** × **←**

WINTER 2025 AQA, GONZAGA SITE **SPRING 2026** VINAVIL SITE

FALL 2026 HERAMBIENTE SITE **SPRING 2027** VINAVIL SITE

Building and running the first DEMO plant. From urban sludge to bio-based crotonic acid.

Production of poly(vinyl acetate-co-crotonic acid) from bio-based crotonic acid.

Building and running the second DEMO plant. From industrial sludge to bio-based crotonic acid.

Building and running a prototype for the photopolymerization of bio-based crotonic acid into poly(vinylacetateco-crotonic acid).

crosslifeproject.com